R E P O R T R E S U M E S

ED 019 741 EA 001 328

A POSSIBLE BREAKTHROUGH IN THE FINANCING OF PUBLIC EDUCATION.

BY- BENSON, CHARLES S.

PUB DATE 20 NOV 67

EDRS PRICE MF-$0.25 HC-$0.64 14P.

DESCRIPTORS- *EDUCATIONAL FINANCE, *PUBLIC EDUCATION, COSTS, *STATE FEDERAL SUPPORT, ACADEMIC ACHIEVEMENT, ACADEMIC STANDARDS, SCHOOL DISTRICTS, SCHOOL TAXES, *EDUCATIONAL IMPROVEMENT, EDUCATIONAL OBJECTIVES, GRANTS, TAX EFFORT, HIGHER EDUCATION, STATE SCHOOL DISTRICT RELATIONSHIP, TEACHER EDUCATION, *STATE PROGRAMS, STATE AID, DISTRICT OF COLUMBIA,

A NEW BASIC CONCEPT IN FINANCING EDUCATIONAL SERVICES IS THE CHANGE FROM VIEWING SCHOOLS AS "STANDARDIZED-OPPORTUNITY-SYSTEMS" TO SEEING THEM AS "DIFFERENTIATED-OUTPUT-ACCOUNTABILITY-SYSTEMS." THE ACCOUNTABILITY SYSTEM OF FINANCE, REQUIRING A SUPPLY OF ANALYTICAL STUDIES TO GUIDE DECISIONMAKERS, WOULD HAVE THREE MAIN COMPONENTS--(1) STATE GOVERNMENTS SHOULD SET MINIMUM STANDARDS OF STUDENT ACHIEVEMENT IN BASIC SUBJECTS AND COMPUTE EACH DISTRICT'S COSTS FOR PROGRAMS THAT WOULD ALLOW STUDENTS TO MEET OR SURPASS THE STANDARDS, (2) STATE GOVERNMENTS SHOULD ESTABLISH AN "EDUCATIONAL IMPROVEMENT FUND" TO STIMULATE ADVANCES IN SCHOOL PERFORMANCE, AND (3) LOCAL INITIATIVE SHOULD BE ENCOURAGED TO FUNCTION ON TOP OF THESE TWO STATE PROGRAMS. LOCAL INITIATIVE COULD BE EXERCISED BY MEANS OF A SUPPLEMENT TO A STATE INCOME TAX, WHICH SHOULD BE MATCHED BY THE STATE GOVERNMENT UNDER A "PERCENTAGE-EQUALIZING" SUBVENTION. FINALLY, FOUR ADDITIONAL STEPS SHOULD BE TAKEN IN THE FORM OF THE FOLLOWING CONTRACTUAL ARRANGEMENTS--(1) STATE CONTRACTS WITH PRIVATE FIRMS TO UP-GRADE LOW-PERFORMANCE SCHOOLS, (2) LOCAL DISTRICT CONTRACTS WITH STATES TO SUPPORT A DEFINED SET OF IMPROVEMENT GOALS WITHIN ITS BORDERS, (3) UNIVERSITY ADDITION OF 35-40 PERCENT OVERHEAD IN GOVERNMENT CONTRACT ARRANGEMENTS, AND (4) STATE GOVERNMENT CONTRACTS ISSUED TO LOCAL DISTRICTS TO MEET THE FULL COSTS OF TEACHER DEVELOPMENT PROGRAMS. THIS PAPER WAS PRESENTED AT THE SYMPOSIUM ON OPERATIONS ANALYSIS OF EDUCATION (WASHINGTON, D.C., NOVEMBER 19-22, 1967). (HW)

ED019741

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

A Possible Breakthrough in the Financing of Public Education

Charles S. Benson

University of California, Berkeley

A paper read at Symposium on Operations Analysis of Education, Office of Education, Washington, D.C., November 20, 1967.

EA 001 328

In the United States we appear to be searching for new, basic concepts in the financing of educational services. The single most interesting idea, in my opinion, is to move from viewing schools as "standardized-opportunity-systems" to seeing them as "differentiated-output-accountability-systems." In the past, the successful school district was one which laid before the student a set of services rather exclusively pointed toward helping him to establish eligibility to enter a four-year college or university. The student who saw fit to seize these opportunities, as expressed in conventional school services of which he could make use, was honored. The one who didn't, by and large, was forgotten.

Now there is a growing movement to hold school boards, teachers' organizations, and, to a lesser degree, parents, accountable for the degree of competence actually attained by all students. Accountability extends to different programs--vocational-technical, as well as academic--and to different stages in the school career of young people. For example, the California Legislature has expressed its intent that all children be able to read at the primary level of reading skills by the end of the third grade. It has, moreover, established a scheme for meeting the full cost, approximately, of special programs in reading instruction to meet the stated objective.

Some of the causes of this change from an "opportunity" to an "accountability" system are easy to see. The rising social cost of school failure, a cost placed in substantial measure on public authorities, together with rising school expenditures unaccompanied by major advances in educational productivity, have led to budgetary

constraint in state and local governments. Accordingly, legislators have become prone to ask questions of local authorities about what the people are getting in return for appropriations for schools. The militancy of minority groups is expressed--in part--in demands for school accountability with respect to student performance. The militancy of teachers' organizations in making demands for improvements in teacher welfare is stimulating school boards to respond with counter demands for increases in teacher productivity. Finally, we have, in growing measure, quantitative indicators of school performance.

For an accountability system to work, it is necessary that there be a supply of analytical studies to guide decision makers. Let us assume that through program budgeting we reach the point where we know fairly accurately how to achieve specific educational outcomes. That is, assume we come to know the frequency, duration, and intensity of particular educational activities required to produce definite types of behaviors in students of different ages, aptitudes, and interests. Further, assume that through analysis we shall be able to determine cost-effective means to accomplish given ends. The question we have before us, then, is what changes in the financing of educational services would make sense. In my view, the changes would be far reaching.

First, it should be possible for state governments to set minimum standards of student achievement in basic subjects and to compute the cost of each district of programs that would allow students to meet or surpass the standards. It seems to me that the

state governments, using, hopefully, a certain amount of federal money, should meet the cost in full of these basic programs.

This is not to say that state government would dictate the structure and conduct of school activities. Rather, the state government, every three years or so, might conduct a "performance audit," to see if a high proportion of students in a given district were achieving at or above the level of minimum standards in basic subjects. In some cases the state might discover that certain schools in a given district were failing to bring a sufficiently high proportion of their students up to the standards. In these instances the state government would have several options: it could use suasion to stimulate greater effort on the part of the district and the laggard schools; it could take over as temporary receiver those schools in the district that were causing the trouble and staff them, possibly, with persons from a state teacher corps; or it could take over the laggard schools and put the management of their programs temporarily out to private contract.

To say that the state pays the full cost of basic programs does not imply that we need move immediately to zero use of property taxes for local education. Rather, we could have mandatory statewide property levies at a uniform rate. No local district use of property taxation would remain, however, so that property taxation for school support, if desired, could gradually be phased out.

The second main proposal I would make for financing an accountability system of education centers on an "educational improvement fund." A fund of substantial magnitude, I suggest, should be established by the state governments to stimulate advances in school

performance. The entitlement of school districts would be calculated on the basis of a weighted student population formula, with the weights recognizing (inversely, of course) the relative socio-economic standing of the districts. In order to get money from the fund a district would be required to enter into a contract, renewable every three years, under which certain objectives, school by school, are stated. Improvement goals would be stated for middle class and ghetto schools alike, though the specific objectives would surely vary from one school to the next. Formulation of the objectives for a particular school should be based to a degree on the desires of the parents whose children the school serves.

Progress toward the improvement goals for each school would be measured in two ways: "value added" and "follow-up." Value added would be represented by the measured gain in achievement experienced by the students of the school from the time they entered it to the time they left. That is, if a student entered the third grade of an elementary school and left at the fifth grade, the school would be accountable only for its progress during these two years. It would seem desirable to establish categories of achievement. This would get around the difficulty that high-achieving students cannot, under present measuring instruments, show large increases in performance.

"Follow-up" would be a process of judging any given school by the performance of its students at the next higher level of education, whether this be junior high, liberal arts college, armed forces, or on-the-job training. Measures of performance in terms of follow-up should be diverse--achievement, conventionally measured,

in basic subjects (where appropriate), grades, stability of attendance, job advancement, etc.

The objectives in establishing a scheme of school improvement grants are several:

1. To establish a cash nexus between the interests of the state government in seeing school districts move toward higher levels of performance and the grant earning capacity of local districts. In the past, state incentives to school districts have emphasized process variables, such as paying teachers higher salaries, or reducing class sizes, or establishing school libraries. The present proposal emphasizes performance criteria to earn extra grants.
2. To encourage schools to think in terms of establishing for themselves operational objectives, at least some of which are measurable in quantitative terms.
3. Similarly, to encourage schools to consider alternative means to accomplish the stated objectives.
4. Through the follow-up criteria to encourage the administration of each school to discover for itself what it needs to do to provide articulation between its programs and those of the next higher level of education, recognizing that at the secondary level these next higher levels are different for different students. That is, one builds an incentive into school administrations to be concerned about articulation, rather than relying upon central office coordinators to achieve links among programs simply by exhortation.

5. To provide a measure of school progress that emphasizes more strongly the position of a single school against its standing at an earlier point of time, than it does the position of school vis a vis other schools in the district (or in other districts).

These are two main elements of a system of finance that could be established if we had reliable information about relations between educational inputs and outputs. On the one hand the state would underwrite school cost of basic instruction and would place itself in the position of offering financial incentives toward each school's achieving a higher level of measurable performance--the incentive, moreover, would apply to what already are regarded as good schools as well as to what might be regarded as bad schools.

Then there should be a third main component of a new system of finance; namely, one that allows local initiative to function on top of these two state programs. Earlier I stated that there should be no local discretion with regard to property tax rates, and obviously local initiative cannot be exercised in the absence of local taxing power. What I suggest, then, is that the local component of school support be a supplement to a state income tax. This device would be especially suitable for school districts to use. In the first place, the tax relates the supporting of school service directly to household income, and household income is, perhaps, the best single measure of private returns from education. Local additions over and beyond the funds provided by the state for basic education and for school improvement would almost certainly be reflected in private, as distinct from social, benefits. So the households in a district would be called upon to make a

pre-payment of a small part of the yield of these investments in private returns and to make that payment to the public sector specifically through a supplementary levy on income in support of the public schools. Further, a local income tax supplement would offer some of the advantages of the propety tax in the local setting but would be free of some of its disadvantages. The property tax, being paid ordinarily as a lump sum, has a visibility that is conducive to fiscal prudence, and, given that school districts receive a large part of their income in grants, i.e., they spend substantial amounts of "other people's money," such a safeguard is necessary. Even though both state and federal income taxes were subject to withholding, it would still be an easy matter to arrange that the local income tax supplement be paid as a lump sum at the time the state income tax form was filed. Indeed, the tax could be collected by the state and returned to the school district in which the taxpayer resided. Each school district could notify the state of the supplementary rate it desired to levy on state tax liability (within a range of rates set, presumably, by the state) and each tax form could include an extra sheet of paper with this information stamped thereon. Because the payment would be in lump-sum form and easily calculated by the taxpayer--10 percent, say, of his state income tax liability--compliance costs would be low and would remain low even when, as is generally the case, school districts chose to change rates of taxation somewhat each year. (Compliance costs, on the other hand, are not low when local governments independently use a local sales tax or when they use a local income tax that is collected under payroll deduction; moreover,

compliance costs rise markedly when the local governments change the rate of tax from one year to the next.) By the fact that the income tax supplement for school purposes obviously belongs to the district in which the taxpayer resides, and not the one or more, say, in which he works, problems of jurisdiction would be minor. There are advantages that the tax offers similar to the advantages of the property tax. At the same time, the income tax supplement, as we have said, would escape some of the disadvantages of the property tax. Because state income taxes are at least slightly progressive, so a supplement would almost certainly be more progressive than the property tax. The income tax supplement would not penalize the consumption of housing. Finally, it would free local government of some of the pressure they feel in pursuing "beggar-my-neighbor" policies to attract industrial properties to their borders, policies that lead them to promise tax concessions, etc.

This supplementary levy on income should be matched by the state government under a "percentage-equalizing" subvention. The state would share financially in local additions to school programs, but to equalize revenue the state would share in at higher percentage of matching in poorer districts than rich. Given that the difference in average household incomes are not terribly great from one district to another, it would be possible to establish a fully operational equalizing grant. For example, any two districts that chose to place a 20 percent supplementary levy on state income tax liability for school support would, under the operation of the percentage equalizing state grant, produce the same number of dollars per student for the supplementary programs. There would

be a one-to-one relationship between the level of the local supplementary tax rate and the level of the supplementary school support.

The general objectives of the proposals so far stated are threefold:

1. To protect the national interest in minimizing the school failure.
2. To provide more powerful incentives toward improvements in school quality in all districts.
3. To allow a reasonable measure of local choice about type and quality of educational programs under an improved form of local taxation.

But I feel that additional steps should be taken. Earlier I mentioned two forms of contractual arrangement. The first had to do with the state's contracting with private firms to up-grade low-performance schools; the second was in the case of a local district's contracting with the state for money to support a defined set of improvement goals for the schools within its borders. I feel there are two yet additional important uses of contractual relationships.

Let us recognize that most of the financial relationships between the federal government and institutions of higher education are expressed in contract form (even where the language of the relationship uses the term, "grants"). The federal government, let us say, undertakes to purchase a given volume of research. The direct costs of performing the work are estimated. The university in which the work is to be done adds a stated percentage, now

often 35-40 percent, as overhead, in compensation for the use of its physical facilities and staff resources. This arrangement is not widely used by the higher governments in supporting elementary and secondary school services. Yet, in certain respects, it would offer advantages. First, it would be much more likely that the government issuing the contract would be made aware of the full direct and indirect cost of the services performed. As it is now, when local governments respond to the mandates and the incentives of the higher levels, they almost always absorb part of the costs of the tasks put on them, even when the grantor is supposedly issuing a 100 percent grant. Second, the contractual arrangement makes it clear where the initiative for new programs lies. For example, when the federal government provides grants of the education of the disadvantaged, the local authorities are supposed to act as if these programs fit within their local values, that they would have instituted the programs themselves if they had had the money, etc. This situation raises the possibility of friction between the local school authorities and the electorate and between the local authorities and the higher levels of government. Under a contractual arrangement, the electorate would see that the local schools were simply carrying out a behest of the higher government, for which the local authorities were fully reimbursed.

Now, various models of student achievement, themselves being early ventures into operations analysis of education, have indicated that the most important budgeting variable affecting student performance is characteristics of teacher, and, especially, the

training of the teacher himself.[1] Can we expect local districts to spend their own money in substantial amounts for the retraining of teachers? It is not likely to happen, because the districts can easily see that success in their retraining efforts simply raises the attractiveness of their teachers in the eyes of recruitment offices from other districts. Hence, it would be appropriate that state governments issue contracts to local districts to meet the full costs of well-planned programs for the professional development of teachers. Under this scheme the probability would be higher, hopefully, than at present that the continuing training of teachers would be relevant to their work in the classroom. In that happy eventuality, it should be possible to develop salary schedules that would distribute pay primarily in accord with the level of professional development reached by a teacher, in contrast to the existing schedules that reward seniority chiefly.

Also, the states might issue contracts to the districts for the establishment of new experimental schools, schools that would explore the educational potential of persons with different kinds of family and academic backgrounds or experience. These facilities would provide the state with a clinical setting in which it could investigate the relative effectiveness of different kinds of training of teachers, taking account of the fact that the aptitudes and interests of teachers differ from one person to the next. These schools would also serve as a setting in which the effectiveness

---

1. James S. Coleman, et al., Equality of Educational Opportunity, 1966; Jesse Burkhead, Input and Output in Large City High Schools, 1967; Charles S. Benson, et al., State and Local Fiscal Relationships in Public Education in California, 1965.

of various technological aids to instruction could be tested under controlled conditions.

This leads us, finally, to the question of federal support. If there is to be a large advance in the quality of educational services in the country, it must rest on the astoundingly productive revenue resources of the federal government. State and local governments, for a variety of reasons, simply do not have the fiscal capacity to support great improvements in schools. Basically, there are two choices for federal financial involvement: categorical aids and general grants. Each categorical aid is self-limiting in dollar flow. Hence, the only way we can have large scale federal support through categorical aids is by proliferation of separate grants, with all this means in bureaucratic manipulation, local frustrations, and, occasionally, unwanted federal interference in local school programs.

So what we want is unrestricted federal support of school services. But the stumbling block has been a lack of confidence in the federal government that it would receive much in return for general education grants to the states. The set of proposals discussed in this chapter might well provide reasonable assurance that federal moneys will serve national objectives: reducing the rate of school failure and moving the general level of school performance upward. Hence, it follows, in my mind, that significant advances in the educational services waits upon the development of operations analysis as a means to establish rational systems of state and local finance. The establishment of these systems is a necessary condition for connecting the provision of school services

with the federal revenue sources. Let's face it: gains in efficiency achieved through operations analysis at existing levels of expenditure are unlikely to raise the performance of school districts up to a growth path that will exploit well the potential of school services for social and economic benefit. More money is needed, and in the public sector it is the federal government, speaking of the long run, that can provide it.